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April 29, 2002

"Express Mail" mailing number.: ET871448814US

Date of Deposit April 29, 2002

I hereby certify that this paper and all papers and fees referred to herein are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner of Patents, c/o U.S. Patent and Trademark Office, BOX SEQUENCE, P.O. Box 2327, Arlington, Virginia 22202.

Holly A. Wolfe

Commissioner for Patents
c/o United States Patent and Trademark Office
BOX SEQUENCE
P.O. Box 2327
Arlington, Virginia 22202

Re: U.S. Patent Application Serial No. 10/000,151 for HUMAN KCR1
REGULATION OF HERG POTASSIUM CHANNEL BLOCK
Our File No.: 1242/49/2

Sir:

Enclosed please find the following:

1. Preliminary Amendment and Response to Notice to File Missing Parts of Non-provisional Application (3 pages) with copy of Notice;
2. An original executed Declaration (2 pages);
3. An executed Assignment (2 pages);
4. Recordation Form Cover Sheet (Form PTO-1595) (1 page in duplicate);
5. Nine (9) sheets of formal drawings and related drawings transmittal;
6. Paper and Computer Readable Copies of the Sequence Listing, along with a

Commissioner for Patents

April 29, 2002

Page 2

Statement that Sequence Listing and Computer Readable Copy are the Same, and a copy of the Raw Sequence Listing Error Report;

7. Fee Transmittal (Form PTO/SB/17) in duplicate; and
8. A return-receipt postcard to be returned to our offices with the U.S. Patent and Trademark filing stamp thereon

Please contact our offices if there are any questions with this matter.

The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account Number 50-0426.

Respectfully submitted,

JENKINS & WILSON, P.A.



Arles A. Taylor, Jr.
Registration No. 39,395
Customer No. Bar Code Label:



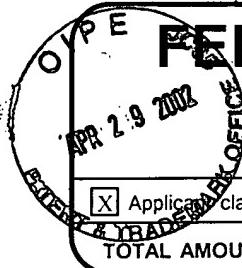
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PATENT TRADEMARK OFFICE

1242/49/2

Enclosures

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



FEET TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 160.00)

Complete if Known

| | |
|----------------------|-------------------|
| Application Number | 10/000,151 |
| Filing Date | October 30, 2001 |
| First Named Inventor | Jeffrey R. Balser |
| Examiner Name | Unassigned |
| Group Art Unit | |
| Attorney Docket No. | 1242/49/2 |

METHOD OF PAYMENT (check all that apply)

 Check Credit card Money Order Other None
 Deposit Account:Deposit Account Number
Deposit Account Name50-0426
Jenkins & Wilson, P.A.

The Commissioner is authorized to: (check all that apply)

- Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) during the pendency of this application
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity | Small Entity | Fee Description | Fee Paid |
|---------------|---------------|------------------------|----------|
| Fee Code (\$) | Fee Code (\$) | | |
| 101 740 | 201 370 | Utility filing fee | |
| 106 330 | 206 165 | Design filing fee | |
| 107 510 | 207 255 | Plant filing fee | |
| 108 740 | 208 370 | Reissue filing fee | |
| 114 160 | 214 80 | Provisional filing fee | |
| SUBTOTAL (1) | | (\$ 0.00) | |

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| | | | |
|--------------------|--------------|----------------|----------|
| Total Claims | Extra Claims | Fee from below | Fee Paid |
| Independent Claims | -20** = | X | = |
| Multiple Dependent | - 3** = | X | = |

| Large Entity | Small Entity | Fee Description |
|---------------|---------------|--|
| Fee Code (\$) | Fee Code (\$) | |
| 103 18 | 203 9 | Claims in excess of 20 |
| 102 84 | 202 42 | Independent claims in excess of 3 |
| 104 280 | 204 140 | Multiple dependent claim, if not paid |
| 109 84 | 209 42 | ** Reissue independent claims over original patent |
| 110 18 | 210 9 | ** Reissue claims in excess of 20 and over original patent |
| SUBTOTAL (2) | | (\$ 0.00) |

**or number previously paid, if greater; For Reissues, see above

3. ADDITIONAL FEES

| Large Entity | Small Entity | Fee Description | Fee Paid |
|---------------------|---------------|--|----------|
| Fee Code (\$) | Fee Code (\$) | | |
| 105 130 | 205 65 | Surcharge - late filing fee or oath | 65.00 |
| 127 50 | 227 25 | Surcharge - late provisional filing fee or cover sheet | |
| 139 130 | 139 130 | Non-English specification | |
| 147 2,520 | 147 2,520 | For filing a request for ex parte reexamination | |
| 112 920* | 112 920* | Requesting publication of SIR prior to Examiner action | |
| 113 1,840* | 113 1,840* | Requesting publication of SIR after Examiner action | |
| 115 110 | 215 55 | Extension for reply within first month | 55.00 |
| 116 400 | 216 200 | Extension for reply within second month | |
| 117 920 | 217 460 | Extension for reply within third month | |
| 118 1,440 | 218 720 | Extension for reply within fourth month | |
| 128 1,960 | 228 980 | Extension for reply within fifth month | |
| 119 320 | 219 160 | Notice of Appeal | |
| 120 320 | 220 160 | Filing a brief in support of an appeal | |
| 121 280 | 221 140 | Request for oral hearing | |
| 138 1,510 | 138 1,510 | Petition to institute a public use proceeding | |
| 140 110 | 240 55 | Petition to revive - unavoidable | |
| 141 1,280 | 241 640 | Petition to revive - unintentional | |
| 142 1,280 | 242 640 | Utility issue fee (or reissue) | |
| 143 460 | 243 230 | Design issue fee | |
| 144 620 | 244 310 | Plant issue fee | |
| 122 130 | 122 130 | Petitions to the Commissioner | |
| 123 50 | 123 50 | Processing fee under 37 CFR 1.17(q) | |
| 126 180 | 126 180 | Submission of Information Disclosure Stmt | |
| 581 40 | 581 40 | Recording each patent assignment per property (times number of properties) | 40.00 |
| 146 740 | 246 370 | Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 149 740 | 249 370 | For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 179 740 | 279 370 | Request for Continued Examination (RCE) | |
| 169 900 | 169 900 | Request for expedited examination of a design application | |
| Other fee (specify) | | | |

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 160.00)

SUBMITTED BY

| | | | | | |
|-------------------|------------------------|-----------------------------------|--------|-----------|----------------|
| Name (Print/Type) | Arles A. Taylor, Jr. | Registration No. (Attorney/Agent) | 39,395 | Telephone | 919-493-8000 |
| Signature | <i>Arles A. Taylor</i> | | | Date | April 29, 2002 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



APR 29 2002

UNITED STATES PATENT AND TRADEMARK OFFICE

05-01-02 100000151 .042902 Page 1 of 2

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COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

MP / K3

| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|------------------------|
| 10/000,151 | 10/30/2001 | Jeffrey R. Balser | 1242/49/2 |

25297
JENKINS & WILSON, PA
3100 TOWER BLVD
SUITE 1400
DURHAM, NC 27707

CONFIRMATION NO. 8248

FORMALITIES LETTER



OC00000007371005

Date Mailed: 01/28/2002

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(l) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 65.**

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawings submitted to the Office are not electronically reproducible. Drawing sheets must be submitted on paper which is flexible, strong, white, smooth, non-shiny, and durable (see 37 CFR 1.84(e));
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

*A copy of this notice **MUST** be returned with the reply.*

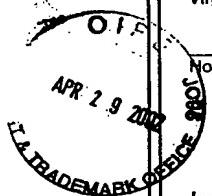
V.G.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

"Express Mail" mailing number.: ET871448814US
 Date of Deposit April 29, 2002
 I hereby certify that this paper and all papers and fees referred to herein are
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 above and is addressed to the Commissioner of Patents, c/o U.S. Patent
 and Trademark Office, BOX SEQUENCE, P.O. Box 2327, Arlington,
 Virginia 22202



Nolly A. Wolfe

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Balser et al.

Examiner: Not Assigned

Application No.: 10/000,151

Group Art Unit: Not Assigned

Filed: October 30, 2001

Docket No.: 1242/49/2

Confirmation No.: 8248

For: HUMAN KCR1 REGULATION OF HERG POTASSIUM CHANNEL BLOCK

Commissioner for Patents
 c/o United States Patent and Trademark Office
 BOX SEQUENCE
 P.O. Box 2327
 Arlington, Virginia 22202

TRANSMITTAL OF FORMAL DRAWINGS

Dear Sir:

Please find enclosed a new set of formal drawings (9 sheets) for filing in the
 above-identified U.S. Patent Application.

The Commissioner is hereby authorized to charge any deficiencies of payment
 associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS & WILSON, P.A.

Arles A. Taylor, Jr.
 Registration No. 39,395

Date: April 29, 2002

By:

Suite 1400 University Tower
 3100 Tower Boulevard
 Durham, North Carolina 27707
 Telephone: (919) 493-8000
 Facsimile: (919) 419-0383

Customer No. Bar Code Label:



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APR 29 2002
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"Express Mail" mailing number: ET871448814US
Date of Deposit April 29, 2002

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Holly A. Wolfe

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Balser et al.

Examiner: Not Assigned

Application No.: 10/000,151

Group Art Unit: Not Assigned

Filed: October 30, 2001

Docket No.: 1242/49/2

Confirmation No.: 8248

For: HUMAN KCR1 REGULATION OF HERG POTASSIUM CHANNEL BLOCK

* * * * *

STATEMENT THAT SEQUENCE LISTING AND
COMPUTER READABLE COPY ARE THE SAME

Commissioner for Patents
c/o United States Patent and Trademark Office
BOX SEQUENCE
P.O. Box 2327
Arlington, Virginia 22202

Sir:

In accordance with 37 C.F.R. §1.821(f), applicants hereby state that the Sequence Listing information recorded in computer readable form is identical to the written Sequence Listing (on paper or compact disc).

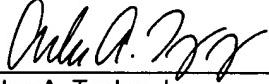
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Respectfully submitted,

JENKINS & WILSON, P.A.

Date: April 29, 2002

By:


Arles A. Taylor, Jr.
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